Clean Energy Action:

Accelerating the Transition to the Post Fossil Fuel World

Privatizing the Risks and Not Just the Profits:

How to TRULY Retire Coal Plants and Fossil Fuel Assets Early AND More Equitably

Clean Energy Action's White Paper Response to:
The July 2020 Rocky Mountain Institute Report
"How to Retire [Coal Plants] Early"

January 2021

With support from:

Descriptions of Clean Energy Action and Supporting Organizations

Clean Energy Action

Clean Energy Action is based in Boulder, Colorado and inspires, trains and supports citizen activists to work at the local, state and national level to accelerate the transition to the post-fossil fuel world.

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Without endorsing every word, the following organizations support the general concepts in this White Paper. The primary author, Leslie Glustrom, takes full responsibility for all errors and omissions.

While several of these organizations are from Colorado, they help make the point that there are likely many dozens of groups throughout the United States who support a truly just system for paying off stranded fossil fuel assets and ensuring that utilities and their bankers not be allowed to fully socialize the risks of their now stranded fossil fuel assets which they likely reaped decades of profits from.

Institute for Local Self Reliance

The Institute for Local Self-Reliance has a vision of thriving, diverse, equitable communities. To reach this vision, we build local power to fight corporate control. We are a national research and advocacy organization that partners with allies across the country to build an American economy driven by local priorities and accountable to people and the planet.

350Colorado

The mission of 350 Colorado is building the local grassroots movement to solve the climate crisis and transition to a sustainable future. 350 Colorado focuses on movement building, keeping fossil fuels in the ground and promoting solutions.

Call to Action-Colorado

Call to Action Colorado is a 501c3, part of the Call to Action network that has been in existence for over 40 years advocating for justice and the dignity of all. Call to Action Colorado and CatholicNetwork advocate for the common good and justice for all Coloradans and sponsored the ActivateCO cross-justice movement conference in 2018.

Clean Energy Lakewood

Clean Energy Lakewood is A policy advocacy group emanating from Lakewood's Sustainability Neighborhood Committees.

Climate Reality Project—Denver Chapter

The Climate Reality Project-Denver Metro Chapter is an all-volunteer nonprofit whose mission is to educate people on the severity of the climate crisis and facilitate personal actions locally, and at the state and federal level. The 100% Committed Team is centered in Denver and engages in local, state, and federal solutions to achieve 100% Renewable Electricity.

Colorado Businesses for a Livable Climate

Colorado Businesses for a Livable Climate is a coalition of businesses across the state of Colorado that are concerned about the threats climate change presents for our state economy, businesses, and communities.

EnergyShouldBe

EnergyShouldBe works to create a renewably powered world that is cost-effective and reliable for electricity, transport, buildings, and industry. We ask key questions and seek answers through research, analysis, and modeling and communicate what we've learned to both technical and general audiences.

GreenLatinos

GreenLatinos is a national non-profit organization that convenes a broad coalition of Latino leaders committed to addressing national, regional and local environmental, natural resources and conservation issues that significantly affect the health and welfare of the Latino community in the United States.

PLAN Boulder County

PLAN Boulder County began in 1959 to protect Boulder's scenic mountain backdrop, initiated and successfully campaigned for the "Blue Line Amendment," which prohibits city water service above a certain elevation. More recently, PLAN-Boulder County has advocates for individual issues related to affordable housing, long-range planning, open space management and conservation, neighborhood character, and clean energy/greenhouse gas reduction

Unite North Metro Denver

Unite North Metro Denver represents North Denver residents, communities and their interests with a special concern regarding pollution, fairness, and getting our utilities off coal and natural gas.

WildEarth Guardians

WildEarth Guardians is dedicated to protecting and restoring wildlife, wild places, wild rivers, and health in the American West. Through its Climate and Energy Program, Guardians works to ensure a just and equitable transition away from reliance on fossil fuels.

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Executive Summary

The Rocky Mountain Institute ("RMI")[1] Report "How to Retire Early,"[2] focuses on financial tools, including "securitization," that recycle capital to utilities and their bankers and sustain the financial status quo. The RMI approach fails to give advocates, their communities and states and our country a full menu of options that are likely to bring more optimal and innovative solutions forward for retiring coal plants equitably and distributing capital to emerging market entrants and unleashing innovation.

In short, RMI presents a variety of tools that start with the assumption that utility customers should be held accountable for the utilities' stranded coal plants. This Clean Energy Action ("CEA") White Paper response explains why the tools proposed by RMI are not the only or best options and discusses the fundamental concept of a market economy system that holds entities responsible for their business acumen and decisions.

This White Paper response suggests that to ensure that coal plants (and other fossil fuel assets) are retired more equitably and that the risks are not just socialized, advocates and regulators should ensure that the process of allocating responsibility for utility stranded assets does the following:

- Engages a broad sector of utility customers including low-income and communities of color.
- Considers holding utilities accountable and require at least partial write-offs of mistaken fossil fuel expenditures.
- Considers the need for adjustments to a utility's Return on Equity ("ROE") if a stranded asset is taken off the utility's books. If utilities are not bearing the risks of their mistakes, then regulators should consider lowering the ROE to reflect the lower risk of utility investments.

[1] RMI has issued many valuable reports on climate change and clean energy, but, as discussed in this response, the "How to Retire Early" report appears to have been undertaken without broad consultation with well-known individuals and groups that have thought deeply about equity and justice in the transition away from fossil fuels.

[2] The RMI Report "How to Retire Early" (which also bears the logos of the Sierra Club and the Carbon Tracker Institute) can be found at https://rmi.org/insight/how-to-retire-early

- Takes a careful look at impacts on low-income customers and their energy burden and the effect of any regulatory decision on these more vulnerable customers.
- Considers the likely benefits of opening electricity markets to new entrants and more competition rather than maintaining primary control of electricity markets by incumbent utilities from the last century.
- Recognizes that the structural decline of the US coal industry likely means that retiring coal plants is not, in many cases, a matter of choice, but is rather an imperative due to lack of a long-term coal supply.
- Considers alternative allocations of the responsibility for paying off stranded assets, including:
    - Utility write-offs of the stranded asset
    - Careful prudence review for any expenditures made on the coal plant
    - Splitting the responsibility for paying off the stranded assets based on the age of the plant. The older the plant, the more responsibility customers would have; the younger the plant, the more responsibility the utility would have. For example, for a plant that was only a third of a way through its life, customers would be responsible for paying off one-third of the stranded asset and the utility would be responsible for paying off two-thirds of the asset.
    - Having customers pay off any portion of the stranded asset that they become responsible for at the cost of debt, without including any profit for the utility on the remaining portion of the stranded asset.

Introduction

Clean Energy Action's mission is to accelerate the transition to the post-fossil fuel world and a lot of our work was first inspired by an effort to stop new coal plants proposed during the tenure of then President George W Bush. Then CEA pioneered the analyses that helped lead to closures of existing coal plants in Colorado and elsewhere. As a result, CEA certainly supports the desired goal of the June 2020 Rocky Mountain Institute report[3] entitled "How to Retire Early: Making Accelerated Coal Phaseout Feasible and Just."

Unfortunately, however, the process, assumptions and conclusions of the RMI report have many shortcomings and the RMI "Retire Early" report gives only a very limited view of the options available to advocates for retiring coal plants. Importantly, the RMI report does not discuss the full array of options for achieving coal and fossil fuel retirements in a just and equitable way that unleashes more innovative approaches to our energy future.

Clean Energy Action's current goal is to help states, communities and activists begin to think about a broader array of options when faced with a stranded fossil fuel asset. We hope that this White Paper will help inspire others to also take a hard look at which strategies should be used in the retirement of stranded fossil fuel assets without assuming, as the RMI report does, that the "best" solution is to transfer all the risk to utility customers while working to keep the stranded asset owners and their bankers "whole."

As discussed in this White Paper, transferring the risk for stranded assets to utility customers will very likely fall disproportionately on low-income customers, further exacerbating the social and financial inequities that already occur in the United States.

[3] The RMI report "How to Retire Early" can be found at https://rmi.org/insight/how-to-retire-early. The report also bears the logos of the Sierra Club and the Carbon Tracker Initiative.

I. Summary and Strengths of RMI Report

The RMI report, "How to Retire Early: Making Accelerated Coal Plant Phaseout Feasible and Just,"[4] lays out options for governments and public finance institutions to accelerate coal phase-out via an integrated three-part approach:

1) Refinancing to fund the coal transition and save customers money on day one,

2) Reinvesting in clean energy, and

3) Providing transition financing for workers and communities.[5]

While the goals are admirable, there are serious questions to ask about the application of the financial tools being promoted in the RMI report. The underlying assumption in the RMI report is that it is up to utility customers to pay off the remaining costs (e.g. undepreciated assets) for coal plants that are retired early. This fails to recognize that the utility owners of fossil fuel assets can and should bear at least some of the responsibility for their mistaken expenditures.

The strengths of the RMI report include:

1) Underscoring the uneconomic nature of many coal plants in the United States[6] and around the world. It is particularly helpful to have the analysis extended to China, India and the European Union.

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[4] The RMI report is found at https://rmi.org/insight/how-to-retire-early

[5] See RMI Report, page 8.

[6] There have been a significant number of analyses showing the uneconomic nature of US coal plants. Here is a sampling.
From 2010 here is a report from the Brattle consulting firm: https://www.brattle.com/news-and-knowledge/news/brattle-study-estimates-epa-regulations-may-result-in-over-50000-mw-of-coal-plant-retirements-and-up-to-180-billion-in-compliance-costs
From 2011 here is a report from As You Sow: https://www.asyousow.org/reports/white-paper-financial-risks-of-investments-in-coal
From 2012, here is the update to the As You Sow report: https://static1.squarespace.com/static/59a706d4f5e2319b70240ef9/t/5a7e4362ec212d8118a67dd2/1518224230301/CoalWhitePaperUpdate-2012.pdf
From 2013, here is the analysis by Union of Concerned Scientists: *Ripe for Retirement: An Economic Analysis of the U.S. Coal Fleet*. https://www.ucsusa.org/resources/ripe-retirement-update
From 2019 here is a Vibrant Clean Energy report: https://vibrantcleanenergy.com/wp-content/uploads/2019/03/LCOE-Mapping/Coal-Cost-Crossover_Energy-Innovation_VCE_FINAL2.pdf
From 2020, here is a report from the Institute for Energy Economics and Financial Analysis on Texas coal plants: https://ieefa.org/wp-content/uploads/2020/07/Solar-Set-to-Drive-Much-Remaining-TX-Coal-Fired-Fleet-Offline_July-2020.pdf

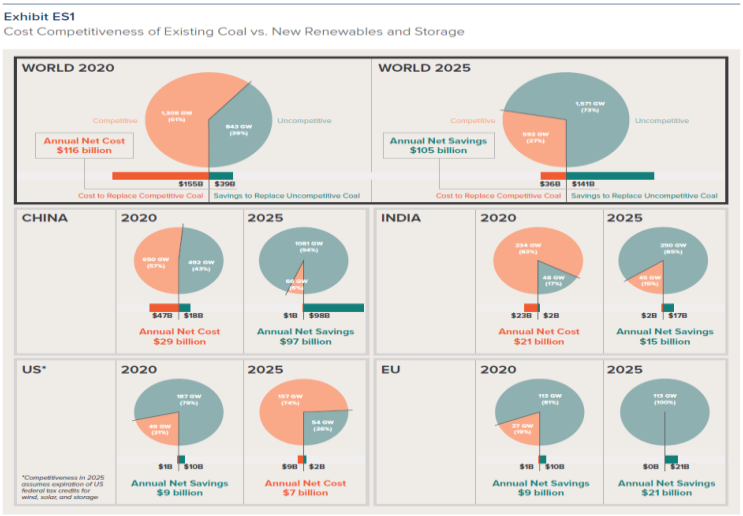
2) Recognizing the need to consider the needs of fossil fuel workers and their communities as we transition past fossil fuels.

3) Introducing some financial tools that could be used to accelerate the phaseout of coal and other fossil fuel assets. The financial tools are described on pages 27-33 of the RMI report and include single-asset refinancing, ratepayer-backed securitization,[7] asset portfolio securitization, green bonds, carbon bonus and debt forgiveness via reverse auction.

A summary of the analysis of uneconomic coal assets around the world as shown in the diagram from page 7 of the RMI report is reproduced in Figure 1 below.

Figure 1

RMI Analysis of Cost Competitiveness of Coal Plants Globally v New Renewable Generation and Storage



Source: RMI

[7] In brief, "securitization" generally refers to the issuance of bonds that are backed by a "Ratepayer Obligation Charge" and so are also called ROC bonds. If the interest rate paid on the bond is lower than the interest rate paid to the utility in its "Weighted Average Cost of Capital" or WACC, then the ratepayer could save money. As discussed in this White Paper, ratepayers can also save money if the utility is required to write-off some of its mistakes or if the state lowers the return that can be granted to a utility for fossil fuel assets. The RMI report discusses securitization on pages 27-30. For a summary of securitization see https://ilsr.org/power-plant-securitization-coming-to-a-state-capitol-near-you/ . There is more information on Ratepayer Obligation Charge or "ROC" bonds at https://saberpartners.com/rocbonds/

While it is helpful to have an analysis of uneconomic coal assets around the world as shown in the summary diagram above, there are very serious questions to be asked about the process, assumptions and conclusions related to the financial tools in the RMI report. These concerns are discussed in the following pages.

II. Concerns About the Process, Assumptions and Conclusions of the RMI Report

A) The RMI Process Did Not Appear to Include Consultation with Communities of Color or Frontline Groups

While the RMI Report gives passing mention to "inclusive social dialogues,"[8] and the authors list over 60 individuals that were consulted, there is no indication that the authors of the report took the time to consult with groups devoted to social and racial equity or front line communities. RMI also didn't consult with clean energy groups that are known to be ardent sceptics of the use of "financial tools" like securitization to essentially bail out utilities and their bankers while burdening ratepayers.

Importantly, RMI did not appear to consult with people of color and low-income ratepayers who are not as easily able to insulate themselves from utility charges by investing in higher efficiency appliances and solar generation and storage systems. As a result, these groups are likely to bear a disproportionate share of any decisions that make ratepayers responsible for utility stranded assets.

Among the groups that do not appear to have been consulted are:

- **National Association for the Advancement of Colored Peoples (NAACP):**[9] It is a very large oversight for RMI to advocate for "inclusive social dialogues," but not to have consulted with the NAACP and other groups that represent people of color. The NAACP has a widely recognized Environmental and Climate Justice Program[10] led by the well-known and highly respected Jacqui Patterson.[11] It is almost inconceivable that RMI (and the other organizations) could have put out a

[8] See page 25, RMI "How to Retire Early" report.
[9] See https://www.naacp.org/
[10] See https://www.naacp.org/issues/environmental-justice/
[11] See https://www.naacp.org/naacp-leadership/jacqueline-patterson/

report that has the word "Just" in the title without apparently having consulted with the NAACP.

- **GreenLatinos:** Once again, it is hard to understand how the RMI report could advocate for "inclusive social dialogues" and fail to consult with the GreenLatinos,[12] a prominent Latino group with a strong set of priorities that include Clean Air and Climate Change and Environmental Justice and Civil Rights.[13] RMI is based in Colorado and the Colorado Field Organizer for GreenLatinos is Ean Tomas Tafoya, again a well-known and respected participant in Colorado climate and energy policy discussions.[14]
- **New Energy Economy in New Mexico:** The non-profit New Energy Economy[15] in New Mexico has a mission to build a fossil-fuel free economy while rectifying social inequity and invigorating our democracy. New Energy Economy is led by the charismatic and strategic attorney and organizer, Mariel Nanasi.[16] [17] Mariel and the New Energy Economy team have written extensively on securitization and on creating a financially just transition away from fossil fuels.[18]
- **Other Frontline Communities and Opponents of Securitization and Utility Bail Outs:** There are literally hundreds of frontline communities and clean energy organizations around the United States and the world who are not likely to be supportive of solutions that bail out utilities and their bankers by using financial tools like securitization and "Ratepayer Obligation Charge" or "ROC" bonds[19] when paying off these bonds will likely fall disproportionately on low-income ratepayers. There is no indication that despite talking about "inclusive social dialogues," that RMI consulted with any of those communities or organizations.

[12] See www.greenlatinos.org
[13] See https://www.greenlatinos.org/corepriorities
[14] See http://www.greenlatinos.org/our_team
[15] See https://www.newenergyeconomy.org/
[16] See https://www.newenergyeconomy.org/staff
[17] For a summary of securitization and an interview with Mariel Nanasi, see https://ilsr.org/power-plant-securitization-coming-to-a-state-capitol-near-you/
[18] Search "New Energy Economy and Securitization" to find many writings. A two page summary of concerns about securitization can be found at the following link: https://d3n8a8pro7vhmx.cloudfront.net/newenergyeconomy/pages/1647/attachments/original/1515795858/PNM_Securitization_-_SF_Conference_%282%29.pdf?1515795858
[19] For more information on ROC bonds see https://saberpartners.com/rocbonds-ratepayer-back-bonds/

B) The RMI Report Assumes Ratepayers Should Bail Out Utilities and Their Bankers

The fundamental assumption in the RMI report is that when utilities have uneconomic (or "stranded") coal plants (and by extension fossil methane or "natural gas" plants and infrastructure) then the utility's customers, or "ratepayers" should pay these stranded assets off.[20] Using that (largely unstated) assumption, the RMI report then outlines a variety of financial tools that can be used to keep utilities and their bankers "whole."

The RMI report includes essentially no discussion of the obvious option of having utilities and their bankers taking responsibility for their mistakes as most other businesses are forced to do.

One of the key tools being promoted by the RMI report is "securitization" which the report describes as:

> *A ratepayer-backed securitization allows ratepayers to directly raise low-cost debt on the basis of the future revenues from a dedicated surcharge on their bills. The proceeds from the debt issuance can then be used to finance near-term ratepayer obligations or needs….Much like financing a mortgage, securitization allows ratepayers to refinance that obligation to reduce their financing costs from a higher return on utility capital (often including higher-cost equity as well as debt) to lower-cost securitized debt.*[21]

Tellingly, "securitization" is typically achieved with "Ratepayer Obligation Charge" or "ROC" bonds[22]—bonds that will mean future utility customers will be obligated to pay for utility stranded assets that they have received no benefits from—a direct violation of

[20] See for example pages 25-33 of the RMI "How to Retire Early" report.
[21] RMI Retire Early Report, page 29
[22] See for example https://saberpartners.com/rocbonds/

sound rate-making principles that attempt to match charges to the customers that received the benefits of utility assets.[23]

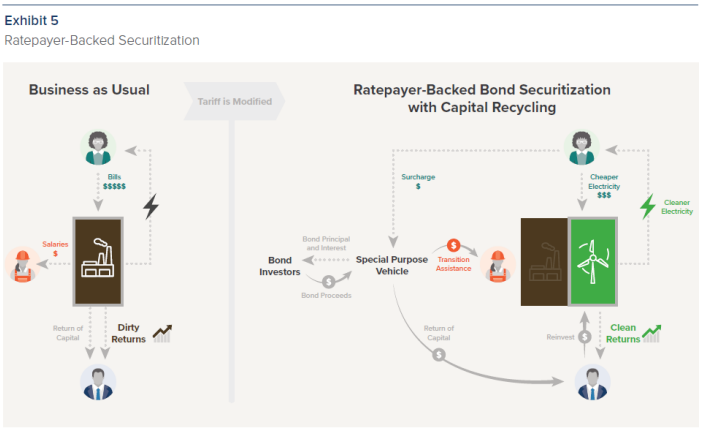
While refinancing a mortgage and paying less for debt is often a good idea, the RMI report begins with the assumption that utility mistakes should automatically become the obligation of utility customers or "ratepayers," even though those ratepayers bore no responsibility for the utility's decision to spend money on assets like coal plants that have become obsolete before their expected service lives were completed.[24]

Two examples of the "financial flow" diagrams used in the RMI report are reproduced below. These diagrams illustrate the flow of money from customers to utilities and their bankers.

Figure 2

Two RMI Proposals for "Financial Tools" to Retire Coal Plants

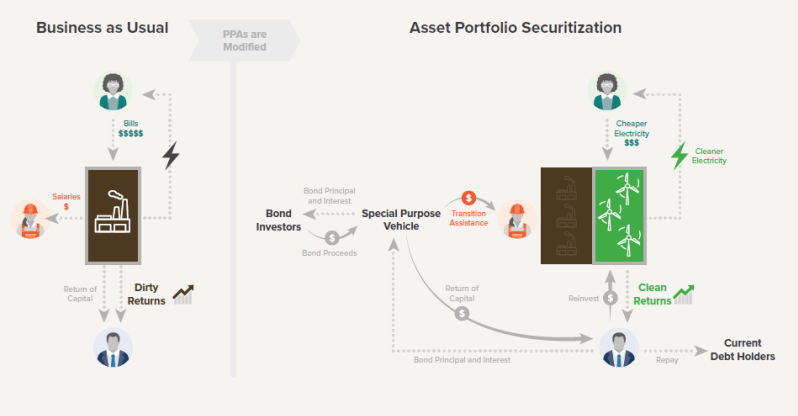
(See Exhibit 5 and 6, pages 28-29, "How to Retire Early")



[23] See for example "Bonbright's Principles of Utility Rate-making" with a digital copy available at https://www.raponline.org/wp-content/uploads/2016/05/powellgoldstein-bonbright-principlesofpublicutilityrates-1960-10-10.pdf

[24] Under questioning by the Chairman Jeff Ackermann of the Colorado Public Utilities Commission (PUC) on October 15, 2020, principle RMI author Uday Varadarajan acknowledged that a Utilities Commission could make a determination that some stranded costs could be disallowed, but this option was not presented in the RMI "How to Retire Early" report.

Exhibit 6
Asset Portfolio Securitization



Source: RMI

While following the arrows can be a bit tricky, in each RMI scheme the bottom line is that money comes from utility customers or taxpayers and flows to utilities and their bankers. As with many aspects of the US financial system, this is likely to weigh disproportionately on low-income and small business customers. These customers are often not able to invest in efficiency measures or solar electric generation or expensive attorneys to represent themselves in regulatory rate-setting proceedings and often already pay a disproportionate amount of their income on energy as discussed further below.

C) The RMI Report Assumes that Utilities Must Be Placated Rather Than Held Accountable

The largely unstated assumption in the RMI report is that utilities and their bankers need to be placated, presumably because they are big and wield a lot of political, financial and legal power.

On page 25 of the "Retire Early" report, RMI summarizes a key argument for placating utilities and their bankers this way:

> Second, **in regulated markets, owners may assert a legal right** to recover their invested capital and to earn a fair return on any unrecovered costs. These claims can take years to resolve, needlessly delaying the necessary transition. In these circumstances, it is better to allow plant owners to recoup their investments by closing than by continuing to operate. The best way to do this is to allow them to recycle the capital from closing coal plants into replacement renewables and to earn their returns on the new investments.

RMI's conclusion is that because coal plant owners "may assert a legal right to recover their invested capital," then it is better to allow owners to recoup their investments and the "best" way is to allow them to "recycle" their capital and earn their returns on the new investments.

Some parents might also argue that it is best to give children whatever they want because otherwise they might have a tantrum. Other parents might suggest that this approach will just lead to more tantrums….Similarly, with the RMI approach, the failure to hold utilities and their bankers accountable for their decisions now, runs the risk of leading to more failures of judgement going forward.

Indeed, most adults know that accountability is key to long-term decision making. When you've made a mistake, you need to feel a bit of the "sting" so that you can make better decisions going forward. The same could be said for utilities which have often been protected from the discipline of market forces which help other business owners learn to weigh the risks of their decisions carefully because otherwise they will suffer the consequences.

Any business that does not feel the consequences of having undertaken risky behavior is likely to continue with risky behavior.

It is true that utilities wield a lot of power of all kinds. Recent stories have discussed the kind of political "manipulations" (likely including bribery) used by US utilities in recent years. [25]

The fact that utilities can bring a lot of pressure—and money—to bear in political and legal proceedings, doesn't necessarily mean that the financial options discussed in the RMI report which take money from utility customers and taxpayers[26] to placate utilities and their bankers are actually the "best" options, as the RMI report concludes.[27]

As discussed further below, utilities often earn a high rate of return on their equity—implying that there is some risk in their investments. It is past time that utilities were held accountable for these risks so that hopefully they will begin to learn to look ahead more carefully before making long-term investment decisions.

D) The RMI Report Assumes that the "Regulatory Compact" is a Strong Legal Argument

The RMI report states that power plant owners in regulated markets "may assert a legal right to recover their invested capital and earn a fair return on any unrecovered costs."[28] While the RMI report does not use the phrase "Regulatory Compact," it is quite likely that this is the basis for the statement about power plant owners asserting a "legal right" to recover the money they invested in fossil fuel plants.

The RMI report appears to assume that claims made under the "regulatory compact" concept would be strong legal claims and thereby require the use of the proposed financial tools to placate the power plant owners; there is, however, strong reason to question this implied assumption as discussed below.

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[25] For examples of utility political influence and corruption see https://www.nytimes.com/2020/08/02/opinion/utility-corruption-energy.html andhttps://ieefa.org/ieefa-u-s-follow-the-money-and-repeal-firstenergys-ohio-bailout/ and https://www.greentechmedia.com/articles/read/ohios-top-utility-regulator-resigns-after-disclosure-of-payment-from-utility-at-center-of-bribery-scandal and the references therein. Many other examples exist.

[26] For examples of possible taxpayer support of coal plant retirements see the "Concessional Financing" mechanisms described on pages 31-33 in the RMI How to Retire Early report.

[27] For RMI's explanation of why utility customers should be held responsible for the mistakes of utilities and their bankers, see for example page 25 of RMI's "How to Retire Early."

[28] See page 25 of RMI's "How to Retire Early."

The concept of the "regulatory compact" arose in the early days of the US electrical industry with one summary of the concept below:

> *The regulatory compact, under which a for-profit electric utility was given a monopoly to provide electricity service in a specific location in exchange for being regulated by a state or city, became the dominant form of providing electricity service in the US by the early part of the 20th century and is still with us today in the United States.*[29]

Ari Peskoe,[30] currently the Director of the Electricity Law Initiative at Harvard Law School wrote a detailed analysis and history of the "regulatory compact" concept in 2016[31] in which he concluded:

> *Framing utility regulation as a "compact" is a rhetorical device that has been invoked by industry to argue against competition and in favor of rate increases and cost recovery for investments that did not benefit ratepayers. While several PUCs have used the term "regulatory compact" as a shorthand description of regulation, no court or PUC has concluded that a utility is legally entitled to relief, such as cost recovery, under a "regulatory compact." On the contrary, PUCs and courts have explicitly rejected such arguments.*

As analyzed in detail by Professor Peskoe, a utility claim that the "regulatory compact" entitles them to recovery of capital and a full return on that capital is not an argument that is based on wide-spread legal precedent. While utilities would like their customers, their regulators and state politicians to believe that the "regulatory compact" provides them with a strong reason for not being held accountable, a more careful analysis—as done by Professor Peskoe—does not support utilities claims that a "regulatory compact" protects them from being at least partially responsible for their stranded assets.

As noted by Professor Peskoe after a review of numerous court cases and utility commission proceedings, the phrase "regulatory compact" is a metaphor, not an actual

[29] From https://www.e-education.psu.edu/ebf483/node/537
[30] See https://hls.harvard.edu/faculty/directory/11615/Peskoe/
[31] See http://eelp.law.harvard.edu/wp-content/uploads/Harvard-Environmental-Policy-Initiative-QER-Comment-There-Is-No-Regulatory-Compact.pdf

contract, and there are no distinct provisions of any such "regulatory compact" that require cost recovery by a utility for stranded assets like obsolete coal plants.

Similarly utility legal scholar and attorney Scott Hempling concluded his review of "regulatory compact" claims with the following:

> *The bottom line? Repetition does not create truth. There is no "regulatory compact."* [32]

Without a strong legal basis for making "regulatory compact" claims, the underlying assumption in the RMI Retire Early report fails.

E) The RMI Report Fails to Consider the Numerous Arguments for Utilities and Their Bankers to Take Responsibility for Their Mistakes and Write Off Their Poor Expenditures

While the facts surrounding each coal plant that will be retired before its original expected retirement date are different, there are many reasons that utilities should be held at least partially accountable for having decided to invest in coal plants—especially utilities that made these decisions in the 21st century.[33]

Examples of issues and trends that a prudent[34] utility would have taken note of in the 21st century include:

a) Climate Change: Prudent utilities should have paid attention to the many reports detailing the increasingly obvious and severe consequences of the build-up of carbon dioxide in the atmosphere as shown in Figure 3 below.[35]

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[32] See https://www.scotthemplinglaw.com/essays/what-regulatory-compact

[33] While it was harder to see ahead when investments in coal plants were made in the 20th century, these coal plants are now largely depreciated and paying off the undepreciated portion is not likely to pose as a big of a burden as paying off coal investments that were made in the 21st century.

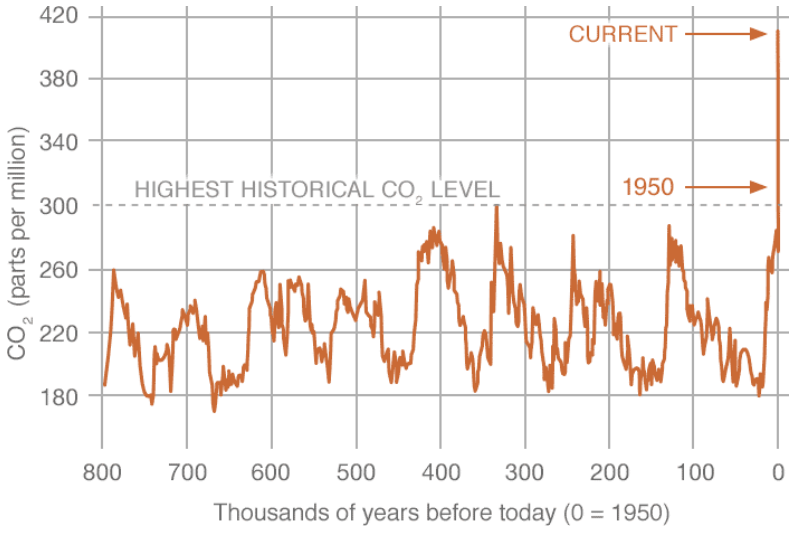
[34] The typical definition of "prudence" in utility law is based on what the utility "knew or should have known." Each state has a different set of regulations and history. For an overview see https://en.wikipedia.org/wiki/Prudent_Investment_Rule

[35] See any of the Intergovernmental Panel on Climate Change (IPCC) reports available at https://www.ipcc.ch/ with reports going back to 1990. For a good history of the understanding of the role of CO2 in long term climate change, see https://history.aip.org/history/climate/index.htm. For a description of the 1856 studies by Eunice Foote on warming of the atmosphere by carbonic acid gas (i.e. CO2) see https://www.resilience.org/stories/2019-07-30/a-foote-note-on-the-hidden-history-of-climate-science-why-you-have-never-heard-of-eunice-foote/. For a collection of scientific papers on the role of carbon dioxide emissions in warming the planet see The Warming Papers : The Scientific Foundation For The Climate Change Forecast. For reports on the impacts of climate change on the US, see **https://www.globalchange.gov/browse**

Figure 3

Carbon Dioxide Levels in the Atmosphere (NASA) For the Last 800,000 Years

https://climate.nasa.gov/vital-signs/carbon-dioxide/



As is now well understood, emitting carbon dioxide to the atmosphere intensifies extreme weather events and creates serious consequences that lead to costs borne by society—a concept often referred to as the "Social Cost of Carbon"[36] and utilities "knew or should have known" that this was the case—particularly for expenditures on coal in the 21st century.[37]

b) Other Pollutants: It has long been understood that the burning of coal leads to large amounts of pollution, including emissions of particulates, oxides of sulfur (SOx), oxides of nitrogen (NOx), heavy metals and other toxic pollutants like mercury, cadmium, arsenic. In addition, coal-burning steam plants consume large amounts of

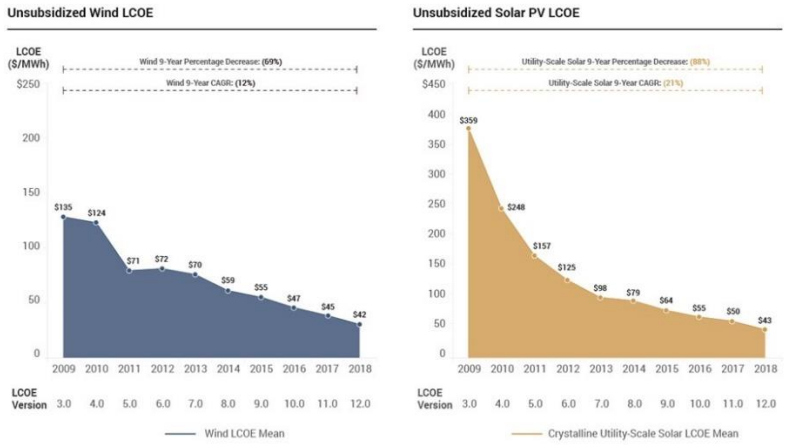
[36] There are many internet sources available on the "Social Cost of Carbon." For a brief introduction see https://www.rff.org/publications/explainers/social-cost-carbon-101/ or https://www.vox.com/2018/9/26/17897614/climate-change-social-cost-carbon or https://www.edf.org/true-cost-carbon-pollution
An EPA fact sheet on the Social Cost of Carbon can be found at https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf

[37] For a report detailing what utilities knew (or should have known) about the impacts of carbon dioxide emissions on the climate of the planet see https://www.energyandpolicy.org/utilities-knew-about-climate-change/

water. Utilities have long ignored these "external" costs of coal pollution[38] but they are reflected in increased health costs and environmental degradation. Moreover, these costs are often borne by low-income communities and communities of color that are least able to bear the extra health and environmental impacts. A prudent utility would have given these health and environmental impacts very careful consideration before spending money on coal generation in the 21st century.

c) **Declining Costs of Wind and Solar:** While the decline in cost of wind and solar has been dramatic in recent years, the declining costs of wind and solar have been quite clear for many years as shown by the Lazard analysis in Figure 4 below. A prudent utility would have followed these trends carefully and avoided investing in fossil fuel resources that would soon be made obsolete by lower cost and much cleaner ways to generate electricity.

Figure 4
Declining Costs of Wind and Solar According to Lazard—2009-2018
https://www.lazard.com/perspective/levelized-cost-of-energy-and-levelized-cost-of-storage-2018/



d) Looming Coal Supply Constraints: Of all the issues that utilities should have known about, it was the strong likelihood that there would be coal supply constraints emerging in the 21st century. Coal has been the key fuel for US utilities for decades and

[38] Physicians for Social Responsibility (PSR) summarized the scientific research on these costs in a report "Coal's Assault on Human Health" found at https://www.psr.org/blog/resource/coals-assault-on-human-health/. A highly cited paper from Harvard can be found at http://www.coaltrainfacts.org/docs/epstein_full-cost-of-coal.pdf The extensive analysis of the external costs of fossil fuels by the National Academy of Sciences can be downloaded for free from https://www.nap.edu/catalog/12794/hidden-costs-of-energy-unpriced-consequences-of-energy-production-and

rather than taking a hard look at their most critical supply chain, US utilities generally assumed that coal would just continue to be available for as long as they wanted it too.

If utilities would have taken a close look at long-term coal supply questions, they would have found that there are indeed very serious questions about US coal supplies as a result of the structural decline of the US coal industry that have and will continue to emerge in the 21st century. US utilities should not be rewarded with financial bailouts for this fundamentally imprudent behavior.

The structural decline of the US coal industry and its implications for equitably retiring coal plants is discussed further in Subsection II. J below.

e) Bad Business Decisions Are Typically Written Off by Businesses—Not Passed to Customers: When businesses make bad decisions (e.g. investing in the wrong inventory or equipment), then they need to write-off[39] those mistakes since very few businesses can survive in a competitive market if they try to pass those poor investments on to their customers. Investor-owned-utilities have been able to avoid this outcome by having regulators sometimes assign the mistakes to utility customers, allowing the utilities to avoid the "learning" that comes from feeling the consequences of their decisions.

The RMI report assumes that utility customers should be responsible for paying off the utilities' mistakes and then offers a variety of ways for customers to do that, rather than starting with the assumption that mistakes made by utilities may need to be at least partially written off by the utility and **not** passed on to customers.

Examples of utility and fossil fuel industry write-offs of bad investment decisions include:

- Duke Energy writing off part of a bad investment in the Edwardsport IGCC (aka "clean coal") plant.[40]
- Southern Company writing off $2.8 billion in the Kemper IGCC "clean coal" plant.[41]
- Occidental Petroleum writing off $6.6 billion in oil and gas assets.[42]

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[39] See for example https://www.investopedia.com/terms/w/write-off.asp
For a specific discussion of utility "impairments" see page 14 in https://www.pwc.com/id/en/publications/assets/utilities-ifrs.pdf#:~:text=Examples%20of%20external%20impairment%20triggers%20relevant%20for%20the,Impairment%20indicators%20can%20also%20be%20internal%20in%20nature.

[40] See for example https://www.exchangemonitor.com/duke-indiana-consumer-group-announce-edwardsport-settlement/ and https://www.in.gov/oucc/2625.htm

[41] See for example https://www.sunherald.com/news/business/article164916647.html

[42] See for example https://www.kitco.com/news/2020-08-10/Occidental-Petroleum-posts-fourth-straight-quarterly-loss-on-6-6-billion-writedown.html#

- The French utility GDF Suez taking a $20.4 billion write down driven in large part by the transition to renewable energy.[43]
- Peabody Energy writing off $1.4 billion in the largest US coal mine—the North Antelope Rochelle mine in Wyoming.[44]

The examples above make it clear that writing off bad business decisions and stranded assets is part of doing business. Utilities with stranded coal plants should be prepared to also write these assets off.

F) The RMI Report Supports the Concept of Privatizing the Profits and Socializing the Risks

By assuming that utility customers are responsible for paying off utilities' coal plants the RMI report supports the concept of "privatizing the profits and socializing the risks," which has been described as follows:

> *Privatizing profits and socializing losses refers to the practice of treating company earnings as the rightful property of shareholders, while losses are treated as a responsibility that society must shoulder. In other words, the profitability of corporations are strictly for the benefit of their shareholders. But when the companies fail, the fallout—the losses and recovery—are the responsibility of the general public. Popular examples of this include taxpayer-funded subsidies or bailouts.*[45]

Privatizing the profits and socializing the risks tends to transfer wealth from the poor to the rich and further exacerbate the inequities in our society which are ultimately destabilizing. Utilities can and should bear at least some of the accountability for their

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[43] See https://www.bloomberg.com/news/articles/2014-02-27/gdf-suez-says-may-cut-dividend-after-writing-down-eu15-billion#

[44] See for example https://ieefa.org/ieefa-u-s-mega-miner-peabody-concedes-american-coal-has-little-value-and-dim-future/

[45] From https://www.investopedia.com/terms/p/privatizing-profits-and-socializing-losses

Which also gives the following description

> *The phrase privatizing profits and socializing losses has a number of synonyms, including socialism for the rich, capitalism for the poor. Another likens it to lemon socialism. The latter was coined in a 1974 New York Times op-ed about New York State's decision to buy two half-finished power plants from the struggling electric utility ConEd for $500 million.*

mistakes. To truly achieve a "just" retirement scheme, a determination of accountability should happen before deciding which, if any, of the financial tools in the RMI report are used to bail out the utilities' on their stranded coal plants.

As discussed further below, utilities often earn over 9% on their capital investments, implying that there is significant risk in their investments. If customers are expected to pay for the utilities' mistakes, then utilities should earn a much lower return on their investments because the investments would be virtually risk free.

In short, utilities have gotten used to having it "both ways"—both earning a high rate on their investments that implies risk, but not actually bearing any of those risks because their mistakes are passed on to their customers. This is a prime example of "privatizing the profits and socializing the risks."

G) The RMI Report Fails to Recognize that Utilities Have Been Receiving Financial Returns of Often Over 9% on Their Equity that Imply They Have Risk; Now they Should Bear That Risk

The RMI report fails to discuss that utilities often earn 9-10% (and sometimes more) on the equity (non-debt) portion of their investments with the justification being that these returns are used to attract capital and compensate their shareholders.[46] While some industries can earn more than 10% on their investments, many do not, and for most investors, a return of over 9% is associated with a higher risk investment.

With Returns on Equity above 9%, investor-owned utilities often earn tens of millions of dollars every year on the "investments" they made in coal plants—and have been earning those profits for many years (or decades). Now that coal plants are becoming stranded assets, it is only reasonable to suggest that utility owners bear at least some of the risk associated with their coal plants.

[46] See for example https://blog.aee.net/how-do-electric-utilities-make-money and https://www.spglobal.com/marketintelligence/en/news-insights/research/average-u-s-electric-gas-roe-authorizations-in-h1-18-down-from-2017

H) The RMI Report Fails to Give Due Recognition to the Extra "Energy Burden" Faced by Low-Income Households

In laying out a variety of financial mechanisms for utility customers to pay off the utility's balance on coal plants that are retired early,[47] the RMI report fails to recognize that these financing and "bail out" schemes are likely to fall disproportionately on low-income customers who already carry an extra "energy burden" as their utility bills make up a larger percentage of their monthly expenses.

An analysis of the "energy burden" already faced by low-income households was done by the American Council on an Energy Efficient Economy ("ACEEE") which described it like this:

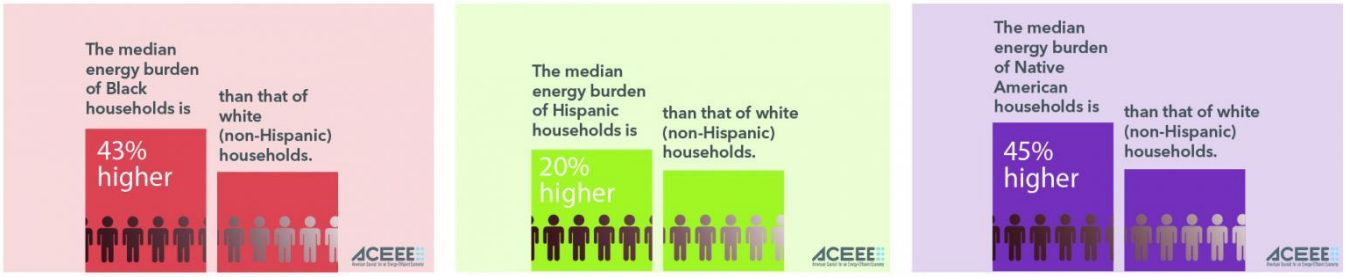
> *ACEEE's 2020 research found that low-income, Black, Hispanic, and Native American households all face dramatically higher energy burdens—spending a greater portion of their income on energy bills—than the average household. High energy burdens are correlated with greater risk for respiratory diseases, increased stress and economic hardship, and difficulty in moving out of poverty.*[48]

The results of the analysis of energy burden are summarized in the ACEEE figure below.

Figure 5

Increased Energy Burden Borne by Households of People of Color

https://www.aceee.org/energy-burden



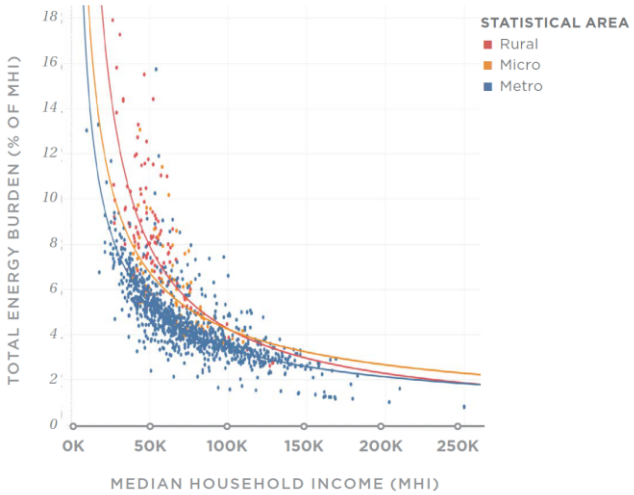
[47] See Exhibits 5-8 in RMI's Retire Early report, pages 29-33.

[48] See https://www.aceee.org/energy-burden (This report was issued during, and refers to the 2019-2021 "Covid-19" pandemic.

Figure 6 below also shows the increasing energy burden experienced by low-income households.

Figure 6
Residential and Transportation Energy Burden as a Function of Income
https://gridlab.org/wp-content/uploads/2020/09/GridLab_Committing-to-Climate-Action-1.pdf (page 28)

Energy burden rises exponentially as income declines, on average. Residents of rural areas tend to have a higher energy burden than residents in urban and micro (suburban) areas.



I) The Conclusions of the RMI Report Perpetuate the Financial Status Quo Rather than Unleashing Competition and Innovation.

The RMI "Retire Early" report appears to operate from the assumption that the "best" way to proceed with coal plant retirements is to maintain the financial status quo in the electric utility industry rather than opening electric markets to new technologies and alternative providers. The RMI report says:

> *The best way to do this is to allow [utilities] to recycle the capital from closing coal plants into replacement renewables and to earn the returns on the new investments.* [49]

[49] See RMI Retire Early report, page 25

While the authors of the RMI report may believe propping up existing utilities is the "best" way to proceed, there are strong reasons to question whether that is truly the best way to proceed.

There are many reasons to question whether the current utility monopoly system is the best system for powering our county in the 21st century, a few of those reasons are summarized below.

- **Utilities knew about climate change and failed to respond:** It is well documented that US utilities knew about the severity of the looming climate crisis and not only failed to respond, but continued to invest heavily in fossil fuel generation and maintained a campaign of on-going deception and misinformation.[50]

- **Utilities have massive political and financial power that can be used to undermine democratic processes:** Given their often monopoly[51] position and ability to monopolize (either fully or partially) sales of what is now an essential commodity, utilities have been able to amass large amounts of wealth and political power that can be used to undermine legislative, regulatory and judicial processes. While some cases become so egregious that they garner large headlines,[52] other times the power of the utilities is felt in their large lobbying and legal budgets—often paid for by their customers as a "cost of business." [53]

- **Utilities can be negligent:** Given their imperative to prioritize shareholder returns, utilities can be tempted to "cut corners" on equipment maintenance and other operations, often with devastating consequences. The fires in California in recent years are one example,[54] but there are many others.[55]

[50] See https://www.energyandpolicy.org/utilities-knew-about-climate-change/
[51] For a recent discussion of the issues associated with monopoly (or near-monopoly) power see https://ilsr.org/fighting-monopoly-power/
[52] See for example https://www.utilitydive.com/news/top-ohio-lawmaker-charged-with-accepting-61m-bribe-in-scheme-to-pass-nucle/582055/ and https://ieefa.org/ieefa-u-s-follow-the-money-and-repeal-firstenergys-ohio-bailout/
[53] See for example https://www.propublica.org/article/four-types-of-scandals-utility-companies-get-into-with-money-from-your-electric-bills
[54] See for example https://www.cbsnews.com/news/pg-e-pleads-guilty-manslaughter-paradise-california-fire-84-counts/
[55] See for example https://www.ehstoday.com/safety/article/21912985/osha-issues-1-million-fine-for-fatal-colorado-tunnel-fire and https://www.nytimes.com/2018/06/14/business/energy-environment/california-fires-utilities.html

- **Utilities can stifle competition and innovation:** When competition is allowed, it quickly becomes clear that there are many alternate providers of electrical service and these market entrants can often build projects and deliver electricity at lower costs than can incumbent utilities who are not as nimble or competitive as these new market entrants.[56]

J) The RMI Report Fails to Consider the Likely Impact of Future Coal Supply Constraints in Accelerating Coal Plant Retirements

It is axiomatic that coal plants need a supply of coal to operate as coal plants. The RMI report fails to consider the impact of the structural decline of the US coal industry on the future operation of US coal plants. In short, retiring coal plants is becoming less of a choice and more of an imperative,[57] if for no other reason then the coal plant doesn't have a long-term supply of coal.

It is basic good business practice to understand the supply chains for your business (i.e. where does the coffee come from if you're running a coffee shop etc). Yet, utilities have almost never taken a hard look at the supply chain for what was their dominant fuel through the 20th century, which was coal.

Instead of taking a hard look at long-term coal supplies, virtually all US utilities blithely assumed that coal would just "show up" for as long as needed—despite the fact that coal is a quintessential example of a non-renewable resource.

A hard look at US coal supplies would have identified the following issues:[58]

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[56] See for example https://www.denverpost.com/2018/01/16/xcel-energy-low-bids-for-colorado-electricity/ and https://www.dmea.com/dmea-flips-switch-guzman-energy and https://mountaintownnews.net/2020/05/30/fountains-electricity/ and https://www-static.bouldercolorado.gov/docs/RFIP_One-pager-1-201902061233.pdf and https://www-static.bouldercolorado.gov/docs/RFP_Summary_of_Results-1-202010071651.pdf

[57] As this report was being finalized, Professor Emily Grubert at Georgia Tech published an analysis of all US fossil fuel infrastructure in *Science* magazine pointing out that most fossil fuel infrastructure would be ready for retirement by 2035 and so the cost of making the transition to post-fossil fuel alternatives is likely less than previously thought. The article can be purchased from https://science.sciencemag.org/content/370/6521/1171. There may also be a "free to read" article on Emily Grubert's webpage at http://emilygrubert.org/publications/#waterenergy .

[58] The situation with US coal supplies is detailed in two heavily referenced reports by Leslie Glustrom "Coal: Cheap and Abundant, Or Is It?" found at http://astro1.panet.utoledo.edu/~khare/sustainability/coal-glustrom-12feb09.pdf and "Faulty Reporting of US Coal Supplies" found at https://cleanenergyaction.files.wordpress.com/2013/10/warning-faulty-reporting-us-coal-reserves.pdf

- Reports of a 200 year supply of coal were based on an erroneous definition of coal "reserves."
- Mines serving US coal plants are playing out with most having life spans that likely end before 2030.
- There is more coal in the ground, but it is generally not owned by the coal companies and it is buried too deeply to be mined at a profit. In the Powder River Basin of Wyoming, source to about 40% of US coal, the vast majority of the remaining coal is owned by the federal government.
- The US coal industry is suffering from serious financial issues as the cost to mine coal rises while the ability to charge ever-higher prices is constrained by the lower cost of alternatives—including the lower costs of wind, solar and storage resources. As a result, supplies of US coal that can be mined at a profit are largely depleted.
- The top 3 US coal companies all filed for Chapter 11 bankruptcy in 2015 and 2016 and dozens of other companies also filed for bankruptcy in the first two decades of the 21st century.[59]
- The first round of coal company bankruptcies were mostly Chapter 11 bankruptcies that allowed the companies to shed billions of dollars of debt and restructure themselves.
- The next round of coal company bankruptcies is looming and this time there is a significant chance that those bankruptcies will be Chapter 7 or "liquidation" bankruptcies.
- Peabody Energy, the largest US coal producer may be facing the second bankruptcy in five years.[60]

These reports contain several hundred references to the data supporting the conclusions that the US coal industry is in structural decline and is likely to experience serious financial disruptions by 2030 or sooner. Importantly, there is and will be lots of coal left in the ground, but if the coal can not be mined at a profit, not much of it will be mined.

[59] For a examples of coal company bankruptcies in 2019 and 2020, see https://www.usatoday.com/story/news/nation/2019/07/03/coal-collapse-third-company-may-files-bankruptcy/1644619001/ and https://www.nsenergybusiness.com/news/us-coal-company-bankruptcies/ and https://abcnews.go.com/US/wireStory/kentucky-coal-operator-files-bankruptcy-protection-71946274 and https://www.eenews.net/stories/1061428779

[60] See for example https://www.forbes.com/sites/kensilverstein/2020/11/10/president-elect-biden-can-throw-the-coal-industry-a-life-rope-green-infrastructure-projects

- Arch Coal, the second largest US coal producer has indicated it wants to get out of producing coal in the Powder River Basin of Wyoming.[61]

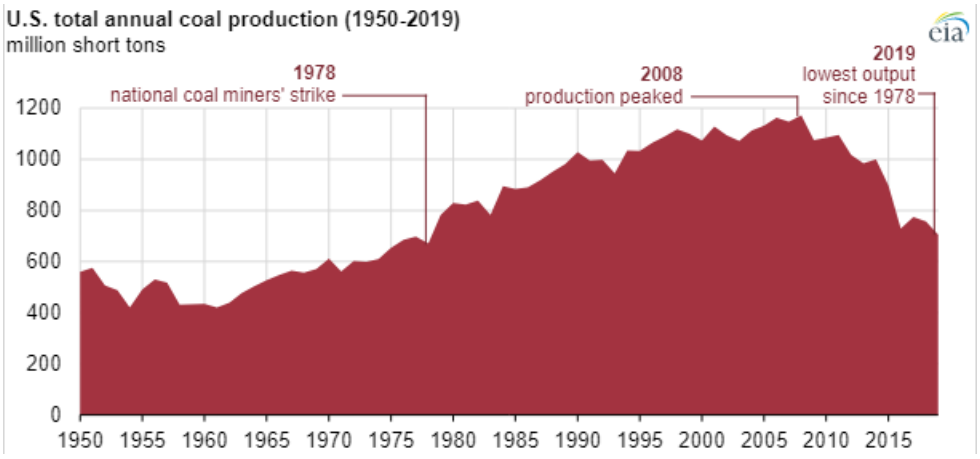
As can be seen in the graph below, US coal production almost certainly peaked in 2008 and has fallen off dramatically since then. The geology and economics of coal production make it very unlikely that coal production will return to the levels seen in the first decade of the 21st century—even if it wasn't increasingly clear that the climate crisis is beginning to spiral out of control.

It is now widely recognized that the US coal industry is in "structural decline"[62] with many (if not all) US thermal coal producers likely to go out of business during the 2020s. Any utility that failed to understand this and act accordingly, should be held accountable for failing to properly analyze the coal supply chain.

Figure 7

2019 U.S. coal production falls to its lowest level since 1978

https://www.eia.gov/todayinenergy/detail.php?id=44536



[61] See for example https://www.gillettenewsrecord.com/news/local/article_e6a238a2-87b6-571e-82e8-c51671824a91.html

[62] See for example https://ieefa.org/ieefa-report-coal-outlook-2019/, https://ieefa.org/ieefa-u-s-mega-miner-peabody-concedes-american-coal-has-little-value-and-dim-future/ and https://www.bloomberg.com/opinion/articles/2020-08-17/coal-is-in-spectacular-u-s-decline-despite-trump-orders

The RMI "Retire Early" report acknowledges that "compensating owners for closing plants that are destined to close in the near term anyway is an unwise use of public funds."[63]

What the RMI report fails to consider is that the structural decline of the US coal industry means that virtually every US coal plant is "destined to close in the near term anyway."

As a result of the structural decline of the US coal industry, the financial tools described in the RMI report are not necessarily needed since coal plant retirement is quickly becoming an imperative--not a choice.

III. Alternative Approaches

The financial tools in the RMI "Retire Early" report may have some uses as the US electric industry transitions from the 20th century predominantly fossil fuel system to a 21st century system that uses renewable generation, storage and a variety of sophisticated management tools to create a low-carbon and more resilient system.

The use of the financial tools discussed in the RMI "Retire Early" report should, however, only be initiated after a detailed analysis and discussion of utility accountability, including the steps outlined in this report including:

- Engaging a much broader segment of utility customers including communities of color, low-income communities and individuals and groups that are not interested in perpetuating our current system of utility control of our electricity future, but rather opening up the system to more competition and market forces.
- Considering the appropriateness of holding utilities accountable, rather than placating the utilities and their financers and perpetuating the status quo.
- Recognizing the need for utilities to do as other businesses do, which is to write off their mistakes.

[63] See RMI "Retire Early," page 25.

- Avoiding decisions that allow utilities to "privatize the profits and socialize the risks."
- Assessing the Return on Equity ("ROE") to utilities in light of any decision to take stranded assets off the utility's books using one or more of the tools outlined in the RMI report that shifts risk from utilities to their customers. If a utility's risk is lowered, then its Return on Equity should likely also be lowered to reflect the lower risk.
- Analyzing which customer segments will bear the largest share of any decision to relieve utilities from writing off their stranded assets and recognizing that low-income utility customers already have a higher "energy burden" than middle- and upper-income customers and the need to avoid adding to this fundamental inequity in our society.
- Recognizing the likely benefits that can come from "creative destruction" and opening electricity markets to new entrants rather than propping up existing utility structures created in the 20th century.
- Recognizing that the structural decline of the coal industry likely means that retiring coal plants is not a choice that requires using financial tools to entice utilities to exercise, but rather an imperative as it becomes increasingly clear that utilities can no longer continue to just assume that "someone" will deliver coal to their coal plants in the 2030s and beyond.

Each state has different laws and regulatory structures and the facts for each coal plant that will be retired are different, but before deciding whether to use one or more of the financial "tools" outlined in the RMI report to bail out utilities with stranded coal plants, there should be a robust discussion about who should bear the responsibility for the cost of the stranded coal plant.

Examples of alternative approaches include:

Utility Write-Off of the Stranded Asset: As discussed above, when companies make a mistake or have assets that are no longer productive, they write these assets off. Many fossil fuel assets have been written off by companies to date and it is reasonable to require utilities to write off coal plants and other fossil fuel assets that are no longer useful. Importantly, the utility has likely received significant profits from the plant and

since these profits have been privatized, it is also appropriate that the risks also be privatized.

Careful Analysis of Prudence of the Plant: Another way to assign responsibly for a stranded asset is with a careful analysis of what the utility "knew or should have known" at the time it made the decision to build a new coal plant or invest in repairs or upgrades for existing coal plants.

Utility and Customers Share Costs Based on Age of the Plant: Another option would be to assign percentage responsibilities based on the percent of the remaining life of the coal plant asset. For example, for a coal plant that only had 10% of its remaining life, then utilities could be responsible for 10% of the remaining costs and customers for 90% of the costs. Conversely, if the coal plant has 60% of its life remaining, the utility would be responsible for 60% of the remaining cost and customers for the other 40%. In short, the newer the plant, the more the accountability falls to the utility for the stranded asset.

Assigning accountability based on the remaining life span of the plant reflects the idea that coal plant decisions made many decades ago did not have the benefit of current knowledge on climate change, cost-effective alternatives and structural decline of the coal industry. In contrast, decisions that have been made more recently had the advantage of much more available information—information that the utilities either knew or should have known and therefore should have not made the decision to make large expenditures on coal plants given that knowledge.

Customers Pay Off the Undepreciated Asset at the Cost of Debt: Another option would be for utility customers to pay off their portion of the plant at the cost of debt without issuing using the securitization/ratepayer obligation charge bond option.

IV. Conclusion

The financial "tools" outlined in the RMI report may have a place, **after** there has been a thorough discussion of utility accountability and equitable solutions for utility customers that also leave room for a new, more competitive and more distributed electricity landscape to emerge. Utilities should not be allowed to privatize the profits and socialize the risks without thorough scrutiny and analysis by utility customers, legislators and regulators.